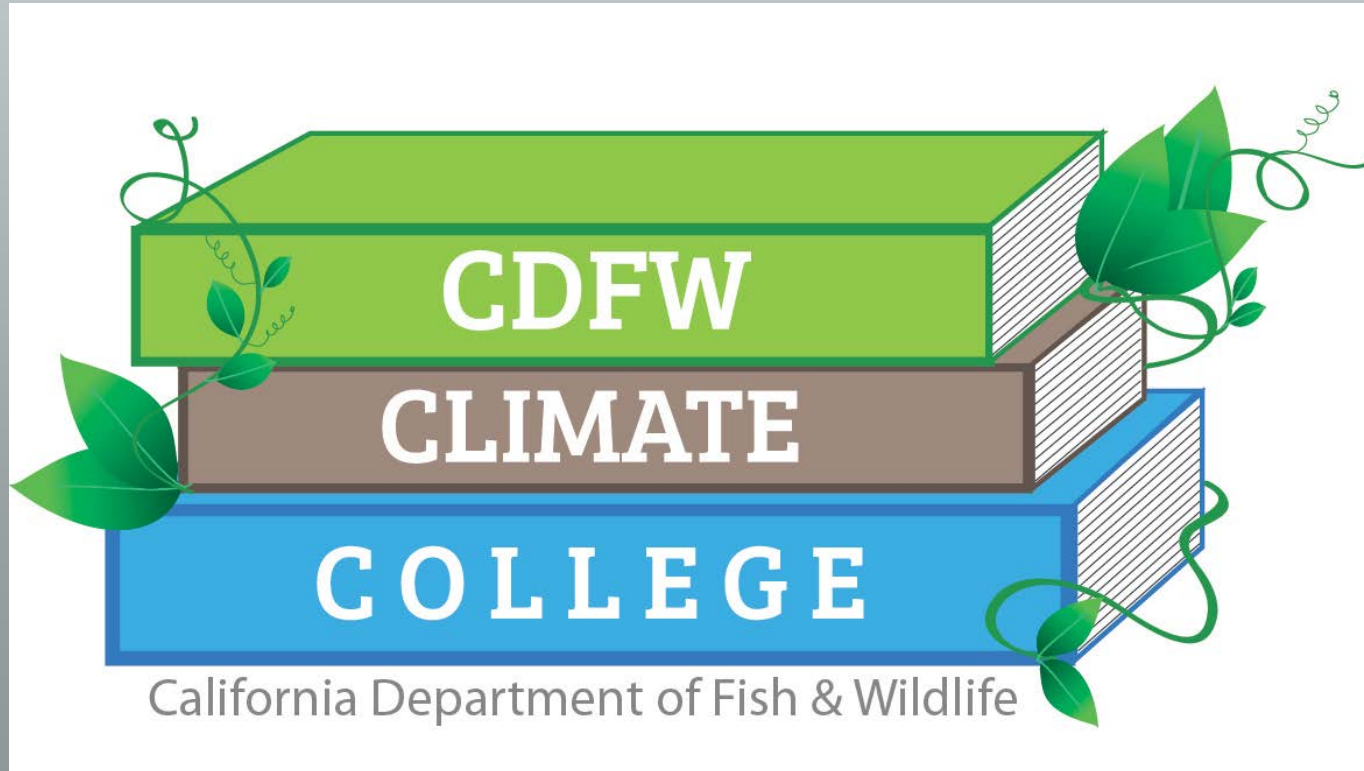


# Building Staff Capacity to Address Climate Change: CA DFW Climate College

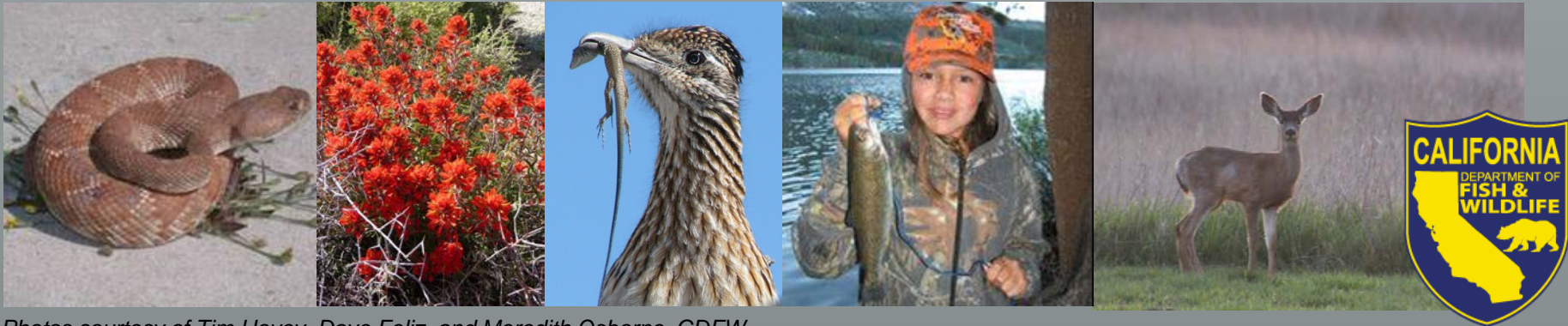


Whitney Albright  
California Department of Fish and Wildlife  
National Adaptation Forum  
April 3, 2013



# Background: CA Department of Fish and Wildlife (CDFW)

- Mission: Manage California's diverse fish, wildlife, and plant resources, and the habitats upon which they depend for their ecological values and for their use and enjoyment by the public.
- Public Trust Doctrine: Wildlife is owned by no one and held in trust by governments for the benefit of present and future generations.



*Photos courtesy of Tim Hovey, Dave Feliz, and Meredith Osborne, CDFW*

# CDFW Branches & Regions

- Administration
- Enforcement
- Resource Management & Policy (*Policy Branches*)
  - Wildlife
  - Water
  - Habitat Conservation
  - Fisheries
  - Data
  - Climate Science & Renewable Energy
- Regional Operations (*Implementation*)





# Background: DFW Climate Science Program

## UNITY

Creating and  
maintaining vital  
partnerships &  
collaborative efforts

## INTEGRATION

Integrating climate  
change into DFW  
programs and  
policies

## ACTION

Products and  
projects that are  
meeting our  
conservation  
objectives



# DFW Climate College

## Outline

- Goals
  - Planning the course
- Course structure and features
  - The course begins!
  - Where are we now?
  - Where are we going?
    - Lessons learned

# Goals

- Provide a foundation of climate change knowledge for ALL staff
- Build a climate community at DFW that includes our partners
- Promote networking across branches/regions AND with our partners



# Planning the Course: A Florida Model



**Doug Parsons and Laura Jerome**  
**Florida Fish and Wildlife Conservation Commission**

# Planning the Course: Climate Training Work Group



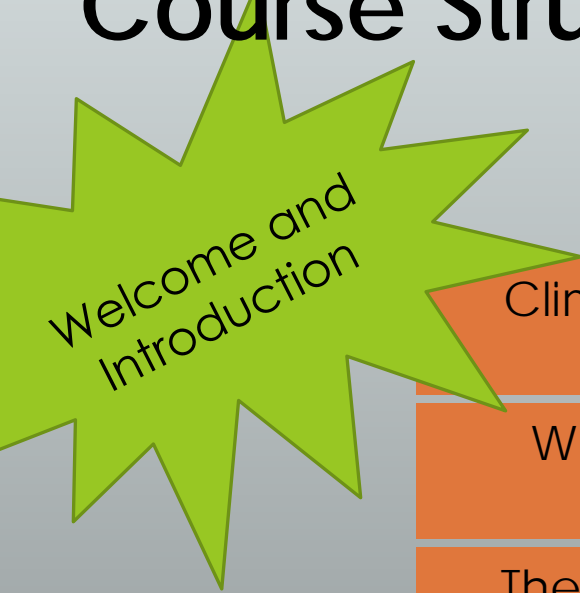
*CDFW Climate Change Stakeholders*



# Course Structure & Features: Components

- Monthly lectures (10 months)
- Recommended readings
- Participation in on-line forum
- Final project
- Opportunities for Certification
- Awards ceremony

# Course Structure & Features: Schedule



Climate 101; understanding the basics of climate science and what we can do about it

What's happening? Projected climate change impacts to California

The National Response: What are other state and federal partners doing?

Go Big or Go Home: Collaborative Partnerships in a Changing Climate

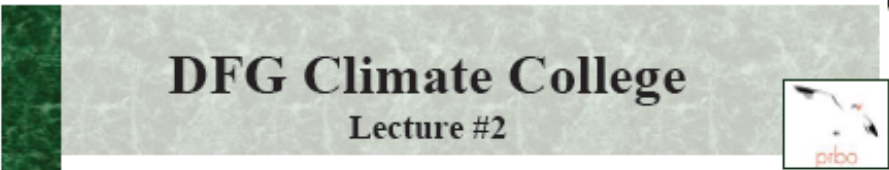
Climate Literacy and Education

Energy-Climate-Human Nexus: Climate Action co-benefits for Natural Resource Conservation

In it for the long haul: CDFW Going Green Sustainability Initiative


Walk the Talk: CDFW Testimonials

# Course Structure & Features: Resources



## DFG Climate College

### Lecture #2



**Title:** Climate 101: understanding the basics of climate science and what we can do about it  
**Speaker:** Ellie Cohen, President and CEO, PRBO Conservation Science  
**Date:** October 15, 2012 (Monday)  
**Time:** 1:30 – 2:30PM  
**Location:** DFG headquarters in Sacramento, Natural Resources Agency building Auditorium  
**WebEx:** Lecture also available to view via WebEx. We encourage DFG staff participating remotely to watch the lectures together by reserving a conference room with DSL. The powerpoint presentation will be posted in advance to minimize interruption for remote users due to WebEx or bandwidth complications. Because of a limit to the number of WebEx participants, we encourage those in the Sacramento area to attend in person.

**Registration for Lecture #2**  
[DFG STAFF CLICK HERE TO REGISTER](#)  
**ALL OTHER PARTICIPANTS:** If you are not a DFG staff member please email [Registrar@DFG.ca.gov](mailto:Registrar@DFG.ca.gov) with your name, email address, organization, and whether or not you intend to participate in-person or via WebEx.  
\*Note: Please register at least two days prior to the lecture. If you would like to be registered for ALL classes at once, please submit a request to [Registrar@DFG.ca.gov](mailto:Registrar@DFG.ca.gov).

**Suggested reading materials recommended by the speaker**

- EPA : [www.epa.gov/climatechange](http://www.epa.gov/climatechange) - excellent overview
- Skeptical Science: [www.skepticalscience.com/](http://www.skepticalscience.com/) - rebuttals to common arguments with excellent information and citations
- Climate-Smart Adaptation Principles. National Wildlife Federation. [www.nwf.org/Global-Warming/Climate-Smart-Conservation/Adaptation-Principles.aspx](http://www.nwf.org/Global-Warming/Climate-Smart-Conservation/Adaptation-Principles.aspx)
- California Governor's Office of Planning and Research: [Climate Change: Just the Facts](#)

See additional resources in the "Climate Change, Ecosystems and Adaptation Resources List" provided below.

**Speaker Biography**  
Ellie M. Cohen has served as President and CEO of PRBO Conservation Science ([www.prbo.org](http://www.prbo.org)) since 1999. Born and raised in Baltimore, Maryland, Ms. Cohen received her undergraduate degree with honors in Botany (focus on ecology) from Duke University. Field studies in butterfly ecology brought her to California in 1979.

She later received her Master in Public Policy degree from Harvard University's Kennedy School of Government, where she was honored with the Policy Analysis Exercise Award for highly

# Course Structure & Features: Resources

## Climate Science Program

- » Activities
- » Resources
- » CDFW Climate College
- » CDFW Climate Stakeholders
- » CDFW Going Green
- » Climate Change Case Studies
- » Vulnerability Assessment Tools
- » For Teachers
- » Western Association of Fish and Wildlife Agencies
- » Director's Bulletins
- » Legislation and Policy

CDFW Climate Science and Renewable Energy Branch  
1416 9th Street  
Sacramento, CA 95814  
[climatechange@wildlife.ca.gov](mailto:climatechange@wildlife.ca.gov)

[Home](#) » [Climate and Energy](#) » [Climate Change](#) » [Climate College](#) » [Training Resources](#)

## CDFW Climate College Training Resources

In order to increase climate change literacy among CDFW employees and our partners, the CDFW has created the Climate College to provide a foundation of knowledge on climate change. Accessing the variety of online climate change tools, literature, and other references is a very useful and important part of this climate change education. In support of this initiative CDFW along with its partners have pulled together a sampling of existing online webinars and videos related to climate change and natural resource conservation. By creating a network of existing webinars and videos, CDFW hopes to provide staff and partners with resources that will empower them to incorporate climate change into their work and to be climate leaders in California.

### Key Repositories of Climate Training Webinars and Videos for Wildlife and Habitat

#### » US Forest Service Climate Change Resource Center

##### » [Climate change presentations](#)

The US Forest Service provides a compendium of excellent video presentations on a variety of topics pertaining to forests, including:

- » Climatology
- » Vegetation
- » Water and Fish
- » Case Studies
- » Modeling
- » Adaptation
- » Forests and Carbon

#### » US Fish and Wildlife Service National Conservation Training Center

##### » [Safeguarding Wildlife from Climate Change Webinar series](#)

The US Fish and Wildlife Service's National Conservation Training Center is currently hosting a web conference series with the National Wildlife Federation focused on climate change and wildlife challenges. Past webinars have covered topics ranging from climate change and California birds, adaptation, vulnerability assessments, landscape connectivity, climate change communication, and more.

##### » [Climate Adaptation Mitigation E-Learning \(CAMEL\)](#)



**CLIMATE SCIENCE PROGRAM**  
*Conservation Today for a Better Tomorrow*  
California Department of Fish and Wildlife  
*presents*  
**CDFW Climate College**

- » [Course Schedule and Materials](#)
- » [Training Certification](#)
- » [Partners](#)

For more information contact [climatechange@dfg.ca.gov](mailto:climatechange@dfg.ca.gov)

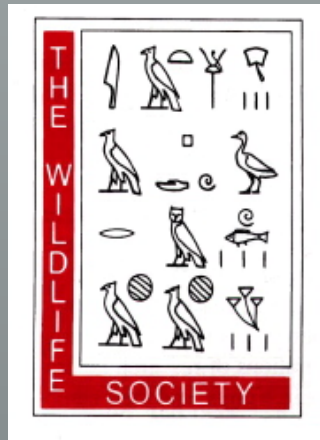


# Course Structure & Features: Incentives

- DFW Certification
- DFW Employee Excellence Awards



- TWS Certification





# The Course Begins!

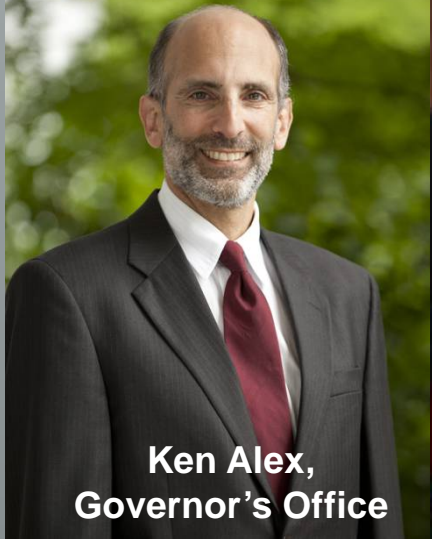
## Lecture #1-- September 2012



Chuck Bonham, DFW



Cliff Rechtschaffen,  
Governor's Office



Ken Alex,  
Governor's Office



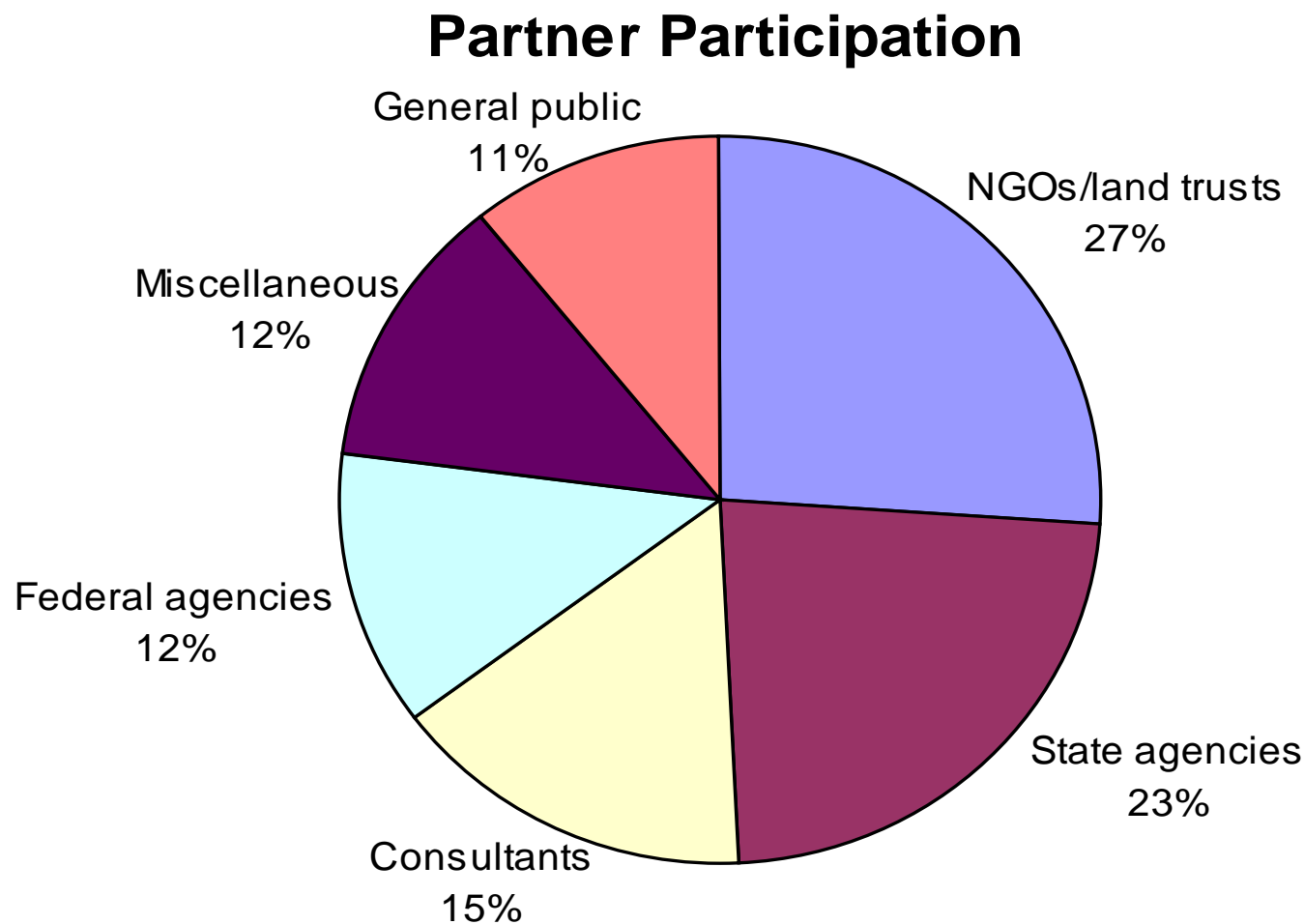
Amber Pairis, DFW

- 176 registered
  - 111 DFW (63%)
  - 65 partners (37%)
- +75% registered for full 10 month course
- DFW: All regions equally represented
- DFW: 15 Branches/Programs - All Divisions represented

# The Course Begins!

## Partner Participation

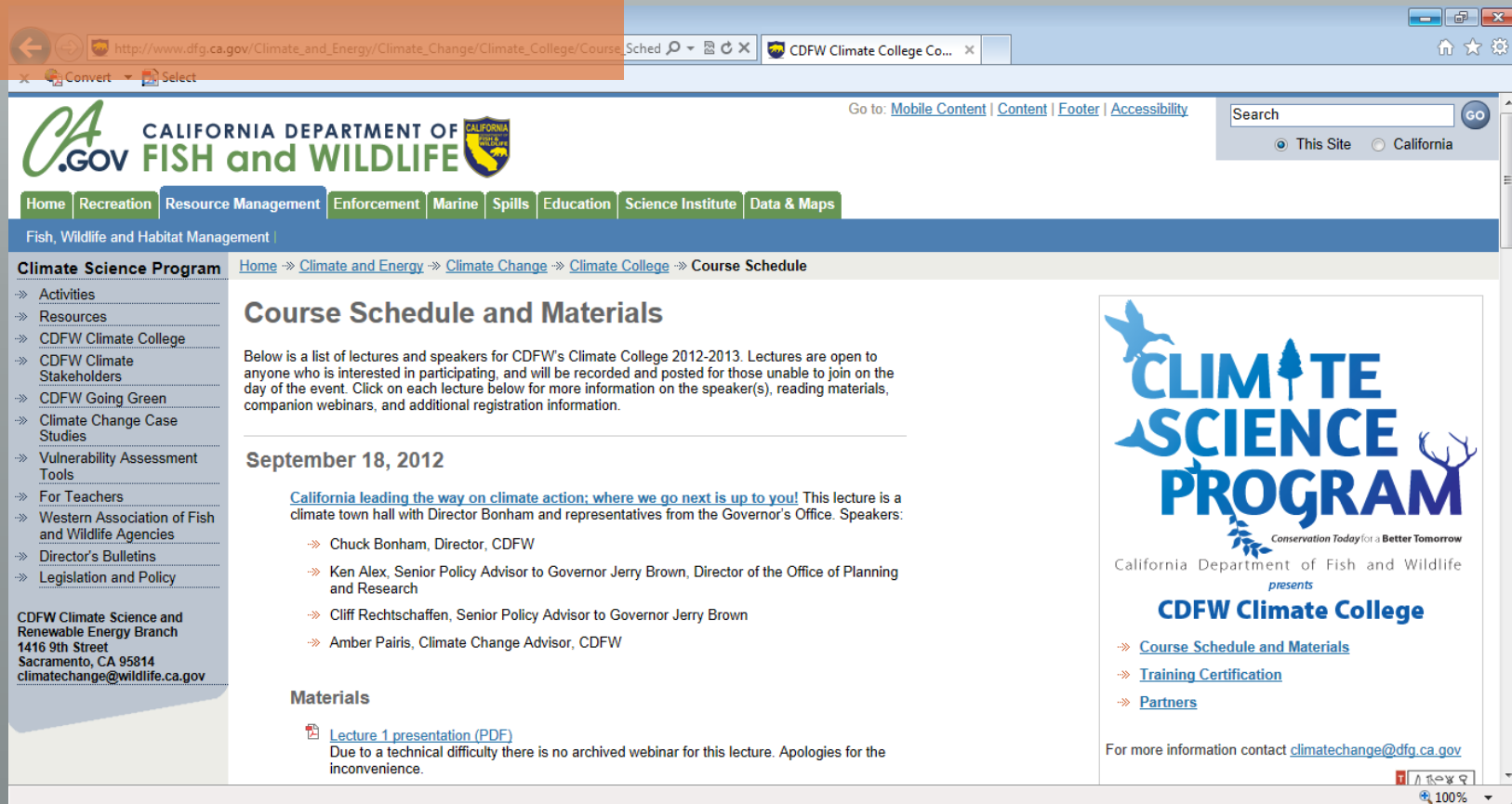
Miscellaneous Category: Representatives from CA Universities, professional scientific society, Tribal representation, local government, industry (utilities), journalist



N=65

# Where are we now?

- Lecture 8 of 9 next week
- Panel discussion in May
- Awards ceremony in June



The screenshot shows a web browser window displaying the California Department of Fish and Wildlife (CDFW) website. The browser's address bar shows the URL: [http://www.dfg.ca.gov/Climate\\_and\\_Energy/Climate\\_Change/Climate\\_College/Course\\_Sched](http://www.dfg.ca.gov/Climate_and_Energy/Climate_Change/Climate_College/Course_Sched). The website header includes the CDFW logo and navigation links: Home, Recreation, Resource Management, Enforcement, Marine, Spills, Education, Science Institute, and Data & Maps. A search bar is located in the top right corner. The main content area is titled "Course Schedule and Materials" and features a list of lectures and speakers for the CDFW's Climate College 2012-2013. The left sidebar contains a "Climate Science Program" menu with links to Activities, Resources, CDFW Climate College, CDFW Climate Stakeholders, CDFW Going Green, Climate Change Case Studies, Vulnerability Assessment Tools, For Teachers, Western Association of Fish and Wildlife Agencies, Director's Bulletins, and Legislation and Policy. The right sidebar contains a "CLIMATE SCIENCE PROGRAM" logo and links to Course Schedule and Materials, Training Certification, and Partners.

Go to: [Mobile Content](#) | [Content](#) | [Footer](#) | [Accessibility](#)

Search

☒ This Site ☐ California

[Home](#) [Recreation](#) [Resource Management](#) [Enforcement](#) [Marine](#) [Spills](#) [Education](#) [Science Institute](#) [Data & Maps](#)

Fish, Wildlife and Habitat Management |

**Climate Science Program**

- [Activities](#)
- [Resources](#)
- [CDFW Climate College](#)
- [CDFW Climate Stakeholders](#)
- [CDFW Going Green](#)
- [Climate Change Case Studies](#)
- [Vulnerability Assessment Tools](#)
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[Home](#) → [Climate and Energy](#) → [Climate Change](#) → [Climate College](#) → [Course Schedule](#)

## Course Schedule and Materials


Below is a list of lectures and speakers for CDFW's Climate College 2012-2013. Lectures are open to anyone who is interested in participating, and will be recorded and posted for those unable to join on the day of the event. Click on each lecture below for more information on the speaker(s), reading materials, companion webinars, and additional registration information.


### September 18, 2012

[California leading the way on climate action; where we go next is up to you!](#) This lecture is a climate town hall with Director Bonham and representatives from the Governor's Office. Speakers:

- Chuck Bonham, Director, CDFW
- Ken Alex, Senior Policy Advisor to Governor Jerry Brown, Director of the Office of Planning and Research
- Cliff Rechtschaffen, Senior Policy Advisor to Governor Jerry Brown
- Amber Pairs, Climate Change Advisor, CDFW

### Materials

 [Lecture 1 presentation \(PDF\)](#)  
Due to a technical difficulty there is no archived webinar for this lecture. Apologies for the inconvenience.



Conservation Today for a Better Tomorrow

California Department of Fish and Wildlife  
*presents*

**CDFW Climate College**

- [Course Schedule and Materials](#)
- [Training Certification](#)
- [Partners](#)

For more information contact [climatechange@dfg.ca.gov](mailto:climatechange@dfg.ca.gov)

# Where are we now?

## Sampling of project ideas:

The evolution of climate change approaches in Natural Community Conservation Plans in California

Develop Climate Change Considerations section(s) for CDFW Salmon Vision Document

Climate Change and the Suisun Marsh: How will Fish and Wildlife Species be Impacted?

Climate Change Impacts to California Rangelands Webpage

Climate Change Impacts on the Amargosa River Vole

Integrating potential climate change impacts into management plans for CDFW properties in the San Joaquin Valley area

Climate Education for All Ages

Partnering with UC Davis Students to Assess Threatened and Endangered Species' Responses to Climate Change



# Where are we going?

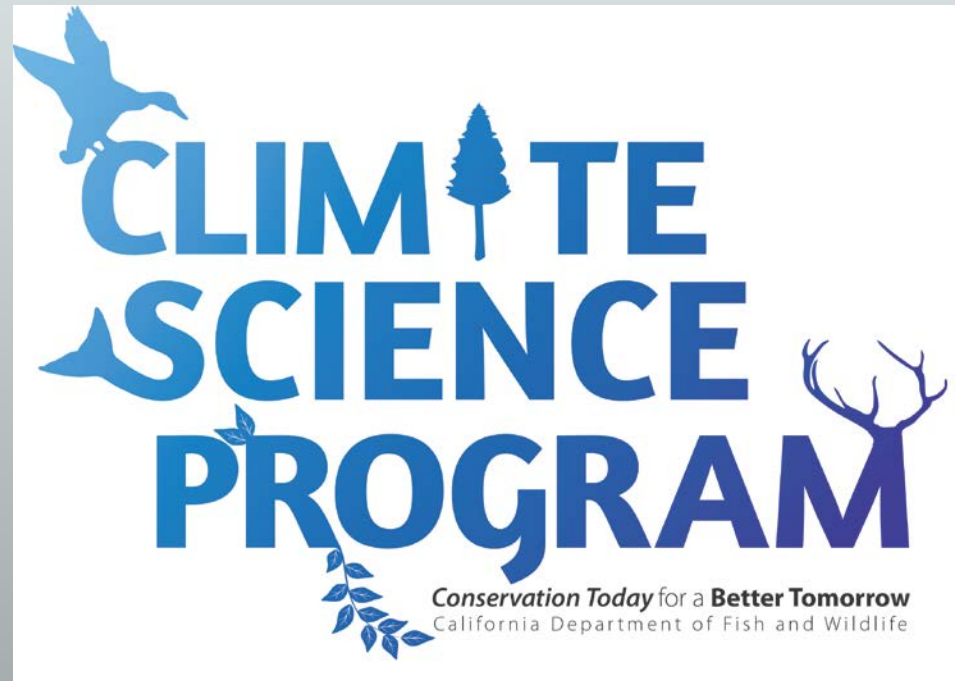
- Future iterations of the Climate College:
  - Marine focus
  - Traditional Ecological Knowledge
- Institutionalized across state government?



# Lessons Learned

- Remote participation is a challenge
- Technology will always get the better of you
- A discussion forum requires TLC
- A ten-month attention span is only somewhat reasonable
- Thinking about how you measure the of success of a project is best done BEFORE the project takes place

Thank you!



**DFW Climate Change website**

[www.dfg.ca.gov/Climate\\_and\\_Energy/Climate\\_Change/](http://www.dfg.ca.gov/Climate_and_Energy/Climate_Change/)

**DFW Climate College**

[www.dfg.ca.gov/Climate\\_and\\_Energy/Climate\\_Change/Climate\\_College/](http://www.dfg.ca.gov/Climate_and_Energy/Climate_Change/Climate_College/)

**Email: [climatechange@wildlife.ca.gov](mailto:climatechange@wildlife.ca.gov)**



A vibrant field of orange poppies under a clear blue sky. In the foreground, several tall, slender stalks of purple lupines stand out against the sea of orange. The lupines have small, bell-shaped flowers clustered along their stems. The poppies are in various stages of bloom, their bright orange petals contrasting sharply with the green foliage and the purple of the lupines. In the background, rolling hills are visible under a bright, sunny sky.

Questions?